

What is claimed is:

1. Electric motor, notably for the actuator of the motor vehicle, comprising a rotor (2) provided with a coil (21), having a first (22) and second (23) radial ends, and mounted rotating in a hollow frame (1) comprising two parts (6, 7) directly mounted on each other and having end walls (6b, 7b), two parts being made of good heat conducting material and said frame bearing induction means (8, 9), characterized by in that said frame (1) is sealed, and the two parts are two components (6, 7) transversally assembled one on each other, and the end wall (6b, 7b) of each part is continuously adjacent to one of said first and second ends (22, 23) of the coil (21).

2. Motor according to claim 1, characterized by the end walls (6b, 7b) enveloping nearer the ends of the coil (21) in the shape of buns.

3. Motor according to claim 2, characterized by the end walls (6b, 7b) of the two pieces (6, 7) are centrally \*bowl shaped.

4. Motor according to one of the preceding claims, characterized by the material being non-magnetic and chosen in the group comprising "zamac", aluminum, magnesium.

5. Motor according to claims 1 to 3, characterized by the material being magnetic or magnetizable, such as steel.

6. Motor according to one of the preceding claims, characterized by one (7) of the two pieces of the frame (1) is made up of one piece with at least one part of a piece of gear box casing of the actuator to which the said motor corresponds.

7. Motor according to one of the preceding claims, characterized by at least one (6) of the two pieces (6, 7) of the frame (1) comprising an end wall (6b) and a radial orientation portion (6a) that contains on its exterior elements (11, 13) that contribute to the increase of the thermal changes with the ambient air.

8. Motor according to claim 7, characterized by the radial orientation portion (6a) carrying the cooling fins (11).

9. Motor according to one of claims 6 and 7, characterized by the said portion (6a) carrying fixation lugs (13).

10. Motor according to one of the preceding claims, characterized by both of the two pieces (6, 7) of the frame (1) comprising an end wall (6b, 7b) and a radial orientation portion (6a, 7a).

11. Motor according to any of the preceding claims, characterized by each piece (6, 7) having an assembly flange of pieces between them.

12. Motor according to claim 11 taken in combination with claim 9, characterized by at least one of the flanges is interrupted by at least a fixation lug (13).

13. Motor according to one of claims 1 to 12, characterized by one (7) of the two pieces of the frame (1) being a closing plate on which the other piece is attached.

14. Motor according to one of the preceding claims, characterized by comprising a plate carrying charcoal placed at the interior of the frame on the end wall of one of the two pieces.

15. Motor according to any of the preceding claims, characterized by the two pieces being in different materials.